

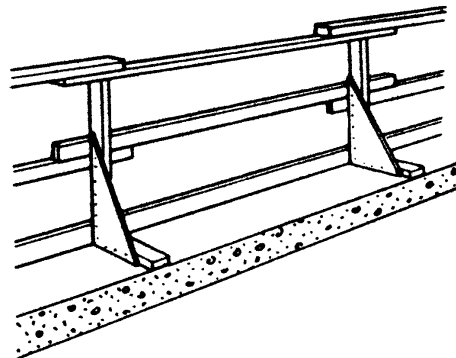
Things to Do Before Training

- ▶ Be ready to discuss where guardrails are used or should be used on the job site.
- ▶ Be ready to explain how to construct guardrails (see back of page).
- ▶ Have examples of tools that can be used for anchoring guardrail posts (vertical shoring jacks, screw-clamp posts, clamp binding posts, or post sleeves that can be placed in forms before pouring slabs).
- ▶ In the index of the **Cal/OSHA Pocket Guide for the Construction Industry**, look up **Guardrails** and read the pages listed.

Introduction

Falls are the leading cause of death and serious injury in construction.

Guardrails prevent falls when placed along roof and floor edges and around openings in floors.



QUESTIONS TO ASK

- ▶ Who here has seen an injury that could have been prevented by guardrails?
What happened?
- ▶ How do you build a basic guardrail?
- ▶ Where on the job site should we put up additional guardrails?



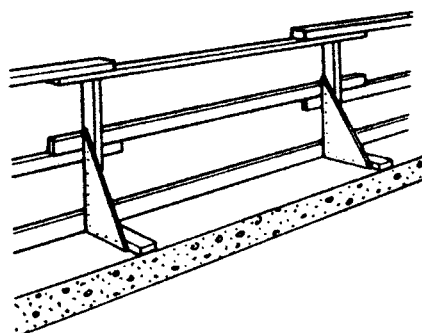
ACTION TO TAKE

- Take a quick walk around the job site to inspect guardrails and see that all floor and roof openings are covered. If there are problems, have a worker fix them.

Key Points to Keep in Mind

- ☐ Guardrails **must be installed at the open sides of all work surfaces that are 7 1/2 feet or higher**, or workers must wear fall protection.
- ☐ Workers installing guardrails must wear fall protection.
- ☐ **Floor and roof openings in any work surface must be railed or covered.**
- ☐ **Guardrails should be placed along open edges of roofs and floors** and also placed on scaffolds and formwork.

- ☐ Basically, a wooden guardrail consists of a
 - top rail
 - midrail
 - toeboard



- ☐ The top rail can be made of a 2x4 with the 4 inch side up. It must be 42-45 inches off the floor. Supporting posts cannot be further than 8 ft apart and must be made of 2x4's or larger lumber. The midrail should be placed midway between the floor and the top rail and must be 1x6 minimum. The toeboard must be a minimum of 4 inches high.
- ☐ Guardrails should be as close as possible to the edge.
- ☐ The post tops and top railing midpoints must be **able to withstand a load of 200 pounds out and down.**
- ☐ When required to cover an opening in the floor or roof, do so with plywood or metal that is **secured in place and capable of withstanding the weight of materials and workers.** The opening needs to be marked "**Opening – Do not remove.**"